CLAIMS

What is claimed is:

1. A method, comprising:

   directing a heat flow towards a thermal interface material (TIM) to soften the TIM; and

   applying the TIM to a heat sink.

2. The method of claim 1, further comprises removing the TIM from the heat sink.

3. The method of claim 1, wherein directing the heat flow comprises changing a normal heat flow in the heat sink.

4. The method of claim 3, wherein the changing of the normal heat flow comprises reversing the normal heat flow in the heat sink.

5. The method of claim 4, wherein the reversing of the normal heat flow is performed by reversing a polarity of a thermoelectric (TEC) module in the heat sink.

6. The method of claim 5, wherein the reversing of the polarity is performed by at least one of the following: reversing terminals of the TEC module, using a device to change the polarity of the TEC module, and adjusting a power source.

7. The method of claim 1, wherein the TIM is applied using at least one of the following: an epoxy dispenser machine and a vacuum suction cup.

8. The method of claim 1, wherein the TIM is softened by increasing the TIM temperature until at least one of the following occurs: the TIM temperature reaches the melting point of the TIM and the TIM temperature is sufficiently close to the melting point of the TIM.

9. The method of claim 1, wherein the TIM comprises at least one of the following: a phase change material and a metal.

10. The method of claim 9, wherein the metal comprises at least one of the following: indium, an indium alloy, tin, and silver.

11. A method, comprising:

directing a heat flow towards a thermal interface material (TIM) to soften the TIM; and removing the TIM from a heat sink.

12. The method of claim 11, further comprises applying the TIM to the heat sink.

13. The method of claim 11, wherein the directing of the heat flow comprises changing a normal heat flow in the heat sink.

14. The method of claim 13, wherein the changing of the normal heat flow comprises reversing the normal heat flow in the heat sink.

15. The method of claim 14, wherein the reversing of the normal heat flow is performed by reversing a polarity of a thermoelectric (TEC) module in the heat sink, the reversing of the polarity of the TEC module is performed by at least one of the following: reversing terminals of the TEC module, using a device to change the polarity of the TEC module, and adjusting a power source.

16. The method of claim 11, wherein the TIM comprises at least one of the following: a phase change material and a metal.

17. The method of claim 16, wherein the metal comprises at least one of the following: indium, an indium alloy, tin, and silver.

18. An apparatus, comprising:

a heat sink comprising a thermoelectric (TEC) module having a polarity; and

a thermal interface material (TIM) coupled with the heat sink, the TIM receiving a redirected heat in the heat sink upon changing of the polarity.

19. The apparatus of claim 18, wherein the TIM is applied at and removed from at least one of the following locations: a base of the heat sink and a thermal gap between the heat sink and a heat source.

20. The apparatus of claim 18, wherein the TIM is applied using at least one of the following: an epoxy dispenser machine and a vacuum suction cup.

21. The apparatus of claim 18, wherein the changing of the polarity comprises reversing of the polarity.

22. The apparatus of claim 21, wherein the reversing of the polarity is performed by at least of the following: reversing terminals of the TEC module, using a device to change the polarity of the TEC module, and adjusting a power source.

23. A system, comprising:

a storage medium;

a integrated circuit (IC) device coupled with the storage medium;

a heat sink coupled with the IC device, the heat sink comprising a thermoelectric (TEC) module having a polarity; and

a thermal interface material (TIM) coupled with the heat sink and the IC device, the TIM receiving a redirected heat in the heat sink upon changing of the polarity.

24. The system of claim 23, wherein the TIM is applied at and removed from at least one of the following locations: a base of the heat sink and a thermal gap between the heat sink and a heat source.

25. The system of claim 23, wherein the TIM is applied using at least one of the following: an epoxy dispenser machine and a vacuum suction cup.

26. The system of claim 23, wherein the changing of the polarity comprises reversing of the polarity.

27. The system of claim 26, wherein the reversing of the polarity is performed by at least of the following: reversing terminals of the TEC module, using a device to change the polarity of the TEC module, and adjusting a power source.

28. The system of claim 23, wherein the IC device comprises at least one of the following: a microprocessor, a microcontroller, a graphics processor, a digital signal processor (DSP), a complex instruction set computing (CISC) processor, a reduced instruction set computing (RISC) processor, and a very long instruction word (VLIW) processor.